

JPRS 78580

23 July 1981

USSR Report

TRANSPORTATION

No. 51

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

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OCEAN AND RIVER

RIVER TRANSPORT IN OB'-IRTYSH BASIN CRITICIZED

Moscow VODNYY TRANSPORT in Russian No 83, 10 Jul 80 p 2

[Article by L. V. Bagrov, RSFSR minister of river fleet: "The Most Important Task of Russia's River Transport Workers"]

[Text] The construction sites of West Siberia and their transport support have long been one of the chief concerns of river transport workers. Freight traffic to the regions of West Siberia has been growing at a faster than average pace; it has increased 1.7-fold during the 4 years of the 5-year period which have passed. A specific program for development of Siberia's river transport is being carried out. In conformity with the well-known decree of the CPSU Central Committee and USSR Council of Ministers entitled "On Measures To Develop River Transport in the 1981-1985 Period," in the river shipping companies of the eastern basins there are to be dozens of construction and reconstruction projects, including the ports of Narym, Urengoy, Labytnangi, Sergino, Nizhnevartovsk and Tomsk. Accomplishment of this program will make it possible to solve many problems related to improving the processing of vessels and reducing the unproductive time they spend in port. But today the chief concern of river transport workers is to meet the cargo traffic target called for by the 1980 program. The results for the first half of the year indicate on the whole assignments have been successfully fulfilled for delivery of cargo to the oil fields of West Siberia. River transport workers have already hauled 5.6 million tons of cargo this year. Yet river transport workers are aware that many problems related to the fullest transport support of the West Siberian complex have not yet been solved. The discussion in today's issue of our newspaper deals with the most important aspects of those problems.

Back in the mid-19th century the great genius of the Russian people Mikhail Vasil'yevich Lomonosov predicted: "Siberia will be added to Russia's might." This prediction was to be borne out only in the context of a socialist society.

Under the leadership of the Leninist party in Siberia, where three-fourths of the potential fuel and energy resources and half of the country's reserves of raw minerals and timber are concentrated, the mightiest fuel and power center of our country and of the entire socialist commonwealth has been built. Even now every other ton of petroleum produced in the Soviet Union comes from West Siberia.

Development of Siberia's natural resources and the life support of a number of areas in this most important region depend to a considerable degree on the transportation service, most of which is performed by the river fleet. Siberia's numerous rivers, which one after another have been transformed into well-ordered waterways, afford the conditions for cargo to be delivered to the most remote points, whether it be a geologist's camp or a major industrial construction project which has sprung up in an out-of-the-way taiga settlement.

In carrying out the decisions of the 24th and 25th CPSU congresses on shaping the country's principal center for petroleum and gas production in West Siberia and also for priority development of river transportation in Siberia, in the Far East and the Far North, vessel crews, waterway maintenance personnel, port personnel, ship repair workers, the entire work force of river transportation on the Irtysh and Ob', led by local party organizations and with the help of the river transport workers of other basins in Russia, have been setting the pace year after year in augmenting the volume of shipments to enterprises and construction projects of the petroleum and gas industry and to geologists of West Siberia's tremendous regional industrial complex.

In the 1970-1979 period the volume of cargo to the petroleum and gas fields increased 3.2-fold, including increases of 5.5-fold to points located above the Arctic Circle, 7.2-fold on the Nadym River and 9.6-fold on the Pur River.

Over the 4 years of the current 5-year period which have passed, river transport workers of the Irtysh and West Siberian shipping companies have delivered more than 50 million tons of varied cargo to the petroleum and gas fields of Tyumen-skaya and Tomskaya oblasts, including 7.2 million tons to fields above the Arctic Circle.

The substantial reinforcement of the physical plant and equipment of shipping companies in the Ob'-Irtysh basin is related to this growth in the volume of traffic. The Irtysh Shipping Company alone has received more than 600 freight vessels over the last 10 years; together they represent 150,000 horsepower and a carrying capacity of 700,000 tons. They include the most highly developed and up-to-date vessels: pushboats with a power of 2,000 horsepower, diesel freighters and tankers in the "Morskoy," "Lenaneft" and "Omskiy" series, and barges with a cargo capacity up to 3,000 tons.

In that period many ports and docks have also been built and expanded in Surgut, Nizhnevartovsk, Tobol'sk, Tomsk, Omsk, Kolpashevo and other points. The docks are now better supplied with machinery. The physical plant and equipment for waterway maintenance and industrial enterprises have been appreciably strengthened. Ship and shore communication equipment has been supplied.

Numerous collectives of highly skilled workers who know and love their jobs have taken shape in the fleet, in the ports and in other enterprises.

Socialist competition, which made it possible for the shipping companies and waterway administrations of the Ob' and Irtysh to cope successfully with last year's plans, assumed broad proportions in the basin. The all-union badge inscribed "Winner in Socialist Competition" was awarded to 1,570 pacemakers of the fleet and shore enterprises and organizations in 1979, and the all-union badge inscribed "Shock Worker of the 10th Five-Year Plan" to 192 persons. The collective of the Irtysh Basin Waterway Maintenance Administration was proclaimed the winner in the All-Union Socialist Competition To Increase Production Efficiency and Work Quality and To Fulfill Successfully the State Plan for Economic and Social Development in 1979 and was awarded the challenge Red Banner of the CPSU Central Committee, the USSR Council of Ministers, AUCCTU and the Komsomol Central Committee.

In the competition the leaders among river transport workers in West Siberia were the crews of the motor vessels OT-2018 of the Irtysh Shipping Company and OT-2032 of the West Siberian Shipping Company, headed by captains M. P. Listopadov and V. S. Manakov, who have been awarded the USSR State Prize, the crew of the Irtysh pushboat OT-2041, whose captain is V. N. Myakishev, winner of the Leninist Komsomol Prize, and a mixed team of workers in the port of Novosibirsk, led by I. Ye. Kladov, winner of the USSR State Prize.

The crews of these vessels were the initiators of progressive new ways of employing the fleet--pushing large tows with an aggregate weight up to 18,000-22,000 tons, the group method of operation and so on. Their know-how has now become the property of many ship's crews. For instance, in the West Siberian Shipping Company the proportion of traffic carried in large tows has reached 57 percent, and more than three-fourths of the entire transport fleet is now operating by the group method.

The dynamic and systematically growing development of the West Siberian fuel and energy complex is defining higher requirements as to fuller satisfaction of its requirements for the delivery of cargo. Crucial tasks are being assigned to the shipping companies of the Ob'-Irtysh Basin in 1980. In the final year of the 5-year period river transport workers are to carry to the petroleum and gas fields of West Siberia more than 16 million tons of varied cargo, including 2.4 million tons destined for points above the Arctic Circle. This is 11 percent more than was carried last year.

At the present time, as the first half of the year comes to an end, it is important to make a thorough analysis of operations during the past shipping season and to compare it to the size of assignments in the second half of the year so that the available potential can be fully utilized and the assignments of transport workers for 1980 unconditionally fulfilled. In this connection it should be clearly borne in mind that for the Irtysh and West Siberian shipping companies and the river shipping industry as a whole there is no more important task than carrying cargo to the oil and gas fields of Tyumenskaya and Tomskaya oblasts.

Unfortunately, certain managers of shipping companies and their subordinate enterprises, having fulfilled plans for 1979, have displayed a certain complacency and miscalculation and have not taken exhaustive steps toward an organized opening of this year's shipping season and ensuring a high pace of operation in its very first days.

The most serious oversights and errors have occurred on the Irtysh. The managers of the shipping company in this major basin did not prepare the fleet satisfactorily for operations, and they failed to meet deadlines for completion of repairs on a number of vessels. Losses in the fleet's traffic capacity charged to this cause alone amounted to 300 million ton-kilometers. Moreover, the fleet of the Irtysh that was in operation performed at a lower pace in the initial period of the shipping season than during the corresponding period of last year, and there were frequent cases of damage to vessels.

In the ports of shipping companies and on shippers' docks in Novosibirsk, Tomsk, Nizhnevartovsk and elsewhere the processing of the cargo fleet has substantially exceeded the established standards. Managers of shipping companies are not drawing timely conclusions from the criticism addressed to them concerning lack of coordination in the operations of traffic departments, failures to meet the established schedules for movement of the fleet, and uneven movement of cargo.

The shortcomings and errors in the operations and productive activity of the shipping companies during the first half of the year also occurred because the ministry's Main Administration for Cargo Traffic and Operation of the Fleet, the Main Port Administration and the Main Fleet Administration slackened their supervision and were less exacting toward them.

The ministry's collegium has severely punished those at fault for the failure to put the fleet into operation and has called upon managers of shipping companies to take specific steps to guarantee fulfillment of the cargo traffic plan and make up the lag in shipping cargo to petroleum and gas fields that occurred in May.

In carrying out the collegium's decision, work collectives of basins and crews of ships did fulfill the assignments of the second quarter for shipment of cargo to petroleum and gas fields. But the shipping company as a whole did not fulfill the second quarter's plan for the volume of cargo and cargo traffic. The Irtysh Shipping Company, which still has a number of vessels under repair, lagged seriously behind in fulfillment of the plan, and its errors and shortcomings in conduct of operations proved to be the most profound. We also need to note that having accomplished the assigned volume of traffic to petroleum and gas fields, the shipping companies did not succeed in delivering cargo in accordance with the approved specification to a number of enterprises and organizations located on the Agan, Trom'yegan and certain other rivers.

These oversights are making the situation in the second half of the shipping season more complicated when we take into account that the plan for this period is a very strenuous one.

In objectively evaluating the operation of shipping companies in the April-June period, we should note that so far enterprises of Minlesprom [Ministry of Timber, Pulp and Paper and Wood Processing Industry] have failed to provide a large amount of timber on whose shipment advance notice had been given. General cargo to be shipped to the northern regions under the plan for the second quarter has not entirely arrived through combined rail-highway transportation. The ministry's main cargo administration has not been furnishing adequate help to the shipping companies of the Ob'-Irtysh Basin in furnishing them cargo. This is why there is a shortage of cargo for the scheduled sailing of vessels in certain transshipment ports--Omsk, Novosibirsk and Tomsk.

The third quarter, which is the peak season in the transshipment process, must be used with maximum efficiency.

Managers of shipping companies must lead the new upsurge of political activity and work efforts of the work force in river transportation resulting from the decrees of the July (1980) Plenum of the CPSU Central Committee and the decision it adopted to call the next congress of the CPSU, the 26th.

The way to fulfill the traffic plan for the shipping season and to make up for the lag that occurred in the second quarter is to improve the organization of work in every way, to enhance the responsibility of every participant in the transportation process, and to be more exacting toward managers of all economic entities.

Principal attention should be concentrated on performing measures to substantially improve utilization of the fleet. To that end vessels need to be given a full load in view of the river depths, the fleet should be loaded and sent to destinations at a smooth pace, and conditions should be created for the fleet to move faster and without stops to destination points.

Port personnel have a responsibility to take exhaustive steps to reduce the time required to process vessels at loading and unloading points and to disseminate widely the experience of the Leningrad transportation junction. All available cargo-handling machines and machinery must be put into operation and utilized without delay, and the most refined technology for cargo-handling operations should be introduced.

Since the lengthy idle time of vessels being processed at customers' docks has not been eliminated, engineering and technical personnel of shipping companies and ports should provide greater assistance in speeding up the processing of vessels at those docks. Extensive use should be made of the know-how in the port of Nadym, which has taken over operational management of the floating cargo-handling equipment of shippers' docks and where the operation of the entire water transport junction is planned by shifts and days, thereby considerably reducing the idle time of vessels.

We can no longer put up with the reluctant owners of shippers' docks, who have shown a negligent and irresponsible attitude toward the use of transportation equipment by allowing the fleet to be regularly delayed during processing. The

existing penalties should be enforced against these dockowners, and with the help of local organizations and people's control organs they should be compelled to provide the conditions for efficient use of the fleet.

The idle time of ships undergoing repair is also intolerable at the present time. We need to be more exacting toward ship repair personnel, improve the delivery of replacement parts to them, staff repair teams and sections with skilled specialists, and speed up performance of all types of repair.

River transport workers in the Ob'-Irtysh Basin, who are in an exceedingly important theater of operations in the 10th Five-Year Plan, will have to show maximum determination and persistence so that in the second half of the year, overcoming the difficulties that arise without breaking their pace, they fulfill the plans, supplemental assignments and socialist obligations adopted for 1980.

At the same time, today our activity should be evaluated not only from the standpoint of the current year, but also from the viewpoint of ensuring the stable operation of the economy, including the river fleet, in 1981--the first year of the 11th Five-Year Plan.

Under the conditions of the Ob'-Irtysh Basin it is important to give timely thought to all the problems related to the fleet's operation over the extended shipping season and to measures for meeting the deadlines of sending ships to the winter quarters planned for them.

We accordingly need to emphasize that the shipping of cargo to the oil and gas fields of Tyumenskaya and Tomskaya oblasts should by and large be completed in the third quarter and every consignee should receive his shipment in the approved quantity and makeup.

The party and government are showing unremitting concern to develop our industry, as indicated by the decisions recently taken to develop the physical plant and equipment of river transport and to improve the social welfare of its workers, especially in the regions of Siberia and the Far East.

Overfulfillment of the annual plan for cargo traffic and delivery to the oil and gas fields of West Siberia is a question of honor for river transport workers of the Ob'-Irtysh Basin, who together with the entire Soviet people have staged socialist competition for a worthy welcome to the upcoming 26th Congress of the Communist Party of the Soviet Union.

7045
CSO: 8144/1350

OCEAN AND RIVER

OMSK PORT'S WORK WITH RAILROADS DESCRIBED

Moscow VODNYY TRANSPORT in Russian No 83, 10 Jul 80 p 2

[Article by A. Zaytsev, chief of the port of Omsk: "Related Industries Have Reserves"]

[Text] The method of the people in Leningrad is helping the port workers of Omsk to reduce the idle time of transportation equipment during cargo-handling operations.

Over the 15 years that have passed since development of petroleum deposits began here, the volume of freight transshipped from rail to water in the ports of the Ob'-Irtysh Basin has increased 3.8-fold. The cooperative effort of the other branches of transportation has helped to speed up delivery of cargo. The unified schedule-plan has become the basis for mutual relations among the branches of transportation. Introduction of the know-how of the people of Leningrad in our port is already yielding appreciable results. For instance, in 1979 the standard processing time dropped 4.4 percent for vessels and 2.3 percent for railroad cars. An annual economic benefit amounting to 78,000 rubles was obtained solely by reducing the idle time of freight cars during loading and unloading and their waiting time. The processing of transportation equipment is being improved this year as well.

The port's work force has already reached the level of the last year of the 5-year period with respect to the total cargo traffic handled, the growth of labor productivity and the reduction of costs in cargo-handling operations. This has become the decisive factor in attainment of the main goal: complete and punctual delivery of cargo to the oil and gas fields.

On what basis are we increasing the efficiency of utilization of the fleet, railroad cars and port equipment?

We are constantly improving the operation of consolidated mixed teams; we are introducing the team job contract in cargo-handling operations; we are mastering new schemes for the stowage of cargo in vessels, and we are using improved grabs in handling cargo. Finally, a large benefit is coming from a more cooperative effort by the collectives of the port's cargo areas and the rail stations of the Omsk Department of the West Siberian Railroad. Operational planning of the

joint effort has been introduced, and unified start-to-finish shifts have been created.

But we must admit that so far the decrees and instructions of policymaking bodies are not being carried out satisfactorily. For instance, a decision was made back in 1977 to make the transition to palletization of shipments of bag cement to all points in regions of the Far North and Far East which have access by river. More than 2 years have passed, but even today all the cement is handled manually, and as yet there are no prerequisites whatsoever for improvement of the working conditions of port personnel. The USSR Ministry of Construction Materials Industry is not carrying out this decision. Nor are railroad personnel taking the necessary steps for priority allocation of cars to shipments carried by more than one branch of transportation, and as a result more than 200,000 tons of planned cargo did not reach the port of Omsk in the second quarter of this year.

Continuous planning is being complicated by the large number of shippers and consignees. It would be advisable for that reason to settle the question of concentrating cargo flows. In future the schedule-plan should evidently program the actions of cargo shippers and consignees as well as those of enterprises at whose docks our vessels are processed.

Day-to-day assistance and attention by the two related ministries--railroads and river fleet--are required to solve these problems. Then the operation of the transportation junction will also be more reliable and efficient.

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CSO: 8144/1050

OCEAN AND RIVER

NOVOSIBIRSK LONGSHOREMAN DESCRIBES DIFFICULTIES

Moscow VODNY TRANSPORT in Russian No 83, 10 Jul 80 p 2

[Article by I. Kladov, leader of a start-to-finish consolidated mixed team in the port of Novosibirsk and winner of the USSR State Prize: "Choosing the Optimal Variants"]

[Text] The work force in the port of Novosibirsk believes that shipment of cement from its docks is more advantageous to the state than its shipment from Omsk, Tomsk and Tobol'sk.

The end of the 5-year period is coming closer and closer every day. I will not be mistaken if I say that today every Soviet man is striving to do particularly good work and to achieve new success in the competition. The members of our start-to-finish consolidated mixed team reported ahead-of-schedule fulfillment of the 5-year plan on 27 June. In that period the team handled and shipped to Siberian petroleum workers, geologists, construction workers and gas industry workers 1.53 million tons of varied cargo. All the members of the team have been making a worthy contribution to fulfillment of planning indicators and the high obligations. The collective has been working under the slogan "The Worker's Guarantee of the 5-Year Plan of Quality."

We were the first team in the port of Novosibirsk to be awarded the team quality stamp. The consignees monitor the shipments they receive. So far not a single claim has been filed against the team.

Today, when the team has achieved good results, we are asking ourselves: Could we do better work? and we are answering: Yes, the potential does exist, and it is not small. By and large the team and indeed the entire port are hindered by the irregular arrival of cargo by rail, so that vessels tend to congregate in the berths and in the roads. Operation is greatly complicated by the inadequate number of gasoline and electric lift trucks. And when new lift trucks do arrive, their quality is poor. I will give just one example. This spring our port received seven gasoline lift trucks from L'vov. Where are they now? They are still "tied up" because they are not in working order.

As before there is more talk than action about palletizing cement. In the current shipping season, for example, we were supposed to receive nearly half of

the cement from the Chernorechenskiy Plant on pallets and on open cars. Unfortunately, the result so far is nil. Yet if this problem were solved properly, the construction projects of West Siberia could receive all their cement through our port, which would relieve the facilities of the ports of Omsk, Tomsk and Tobol'sk for other cargo. And what would be the saving on freight cars--after all, it is only 50 km from the Chernorechenskiy Plant to our docks. Today it is evidently not enough to identify unused potential; one has to use it more fully and put it at the service of the national economy more quickly.

At the present time all the Soviet people are standing the labor watch in honor of the upcoming 26th congress. Our team held a rally, and in response to the party's appeal for staging of competition for a worthy welcome of the 26th congress, we have assumed higher obligations. By the end of the year we intend to handle 205,000 tons of cargo for the national economy instead of the 180,000 set down in the previous obligations. We also have set our sights on new targets to reduce the lay days of the fleet and standing time of freight cars during cargo-handling operations.

7042
C50: 8144/1350

OCEAN AND RIVER

CONTAINER CARRIER SHIPS STAND IDLE

Moscow VODNYY TRANSPORT in Russian 23 Jun 81 p 2

[Article by K. Karachevtsev, deputy chief of the Shipping and Fleet Operations Service under the Azov Steamship Line: "Why Container Ships Are Standing Idle"]

[Text] In the past, the first months of the year were always noted for lacking enough cargo for sea-going ships. The explanation was simple--this was the time for the renegotiation of purchase and sales contracts.

This year's beginning looked entirely different. There was no shortage of cargo for the Azov Steamship Line; the inter-contract pause period was not so noticeable. The steamship line could not cope with the everincreasing flow of cargo. There were not enough ships awaiting unloading.

A paradox arises: on the one hand, there are enough ships available from the standpoint of their ability to haul cargo; yet, on the other hand, there are not enough ships.

Over recent years, tremendous qualitative changes have been made in the composition of the fleet. There has been a significant increase in the number of specialized vessels: container ships, packet ships, bulk carriers, and others. All this is directed primarily at speeding up ship processing in maritime ports and at reducing labor expenditure connected with cargo operations.

The benefits of container ships do not need detailed explanation--a truth known even to people who are not in the transport business. In their time, workers of the Azov Steamship Line pushed actively for the organization and expansion of such cargo haulage. A tremendous amount of organizational effort was devoted to this, and today containerization has become a natural and indispensable feature in the life of our Azov seamen. There is no turning back.

Now, more than 1,000 container ships regularly visit the seaport of Zhdanov, hauling their cargoes. Following their unloading at appointed destinations, these empty containers are supposed to return to port. Our railroad people, however, are more than 3,000 containers behind in their deliveries to the Azov Steamship Line, and there is very little hope that they will show respect to their transport colleagues or the slightest bit of business decorum.

The railroad workers are hanging on to almost one-half of all the containers which belong to the Azov Steamship Line. Meanwhile, the steamship line is paying quite a bit of money each day for every container which it has to rent from foreign firms.

This artificially created deficit, naturally, is playing havoc with the progressive organization of the hauling of cargo. It means that a tremendous volume of goods once again has to be delivered by old traditional methods—aboard regular vessels with the usual technological processing in ports involving a great expenditure of manual labor. This results in an increase in ship layover at piers and to a decrease in that ship's productivity. The circle closes.

Let us examine what the removal of 3,000 containers from maritime fleet operations means to the Azov Steamship Line in this given instance.

Ships of the Azov line, such as the "Romny" type for example, have a planned carrying capability of 138 20-foot containers. On such well-known Azov Steamship Company Lines as "Asitko" or "Azatko", the complete round-trip of a container ship takes about 12 days. On the average, a container ship takes about 2,000 tons of cargo aboard in the port of Zhdanov plus whatever else can be put aboard. Consequently, during a 2-day layover in port of such vessels, almost 4,000 tons of cargo may be unloaded and loaded. Yet if such an amount of general cargo was to be placed aboard a regular vessel the port of Zhdanov would hardly be able to cope with the processing of those 4,000 tons in a 2-day period.

Tremendous losses are suffered by our railroaders also. The most difficult and irrevocable loss is that of time. Freight cars, which are in short supply, are delayed too long in port during freight operations, which delays freight-car turnover.

If our railroad workers were to show themselves to be true adherents of the containerized hauling of cargo, they would find at their disposal a significant amount of rolling stock—freight cars urgently needed by many important branches of our national economy. Unfortunately, our railroaders are sawing off the limb on which they sit.

"The Basic Directions in the Economic and Social Development of the USSR for 1981-1985 and for the Period up to 1990," as approved by the 26th party congress, placed a serious challenge before our maritime fleet—that of improving the effectiveness of export of transport services. Containerization is one of the true and reliable means of meeting that challenge.

Container ships of the Azov Steamship Line regularly visit the ports of Italy, Spain, Yugoslavia, Greece, Turkey, Syria, Lebanon and Egypt. This list of nations—consignees and shippers—continues to grow. Recently, one of our container ships visited Algeria.

We foresee broad possibilities for expanding the containerization of cargo from nations of the Red Sea Basin, of the Near East, and of North Africa. Everything necessary is ready for this: cargo, ships, highly-qualified seamen, as well as the desire of the owners of that cargo. They have the desire to move forward

energetically towards further expansion of containerized cargo hauling. Will anything come of it, however?

The Il'ichevsk plant is just getting under way and cannot, for the time being, satisfy our need for containers. It is possible, of course, for us to once again resort to the expenditure of foreign currency and to rent yet another several thousand containers, but why should we do it? So that one-half of them will once again become the permanent prisoners of our railroaders while our steamship line once again continues to make rental payments to foreign firms? No, if you will forgive me for saying so, this is not a business-like way of doing things. We shall not answer the party's challenge to improve export transport services by so doing.

9643
CSO: 1829/273

OCEAN AND RIVER

BOOK ON LATEST SHIPPING TECHNOLOGY IN EASTERN EUROPE REVIEWED

Moscow MORSKOY FLOT in Russian No 4, Apr 81 pp 74-75

[Review by L. Grankov of book "Perevozki Gruzov Ukrupnennymi Mestami v Smeshannykh Mezhdunarodnykh Soobshcheniyakh" (Shipping Cargo in Consolidated Units in Mixed International Transportation), Izdatel'stvo "Transport", 1980, place of publication, number of pages, and number of copies not given]

[Text] Thanks to the intensive introduction of scientific-technical advances in transportation, the container, stack, roll-on, lighter, and other progressive transportation-technological systems based on the principle of shipping cargo in consolidated cargo units have become widespread in the last decade.

This is the subject of the book "Perevozki Gruzov Ukrupnennymi Mestami v Smeshannykh Mezhdunarodnykh Soobshcheniyakh," published by Izdatel'stvo Transport in 1980. The book summarizes the experience gained during work to streamline the technology of shipping cargo among the USSR, Bulgaria, and East Germany.

The book came as the result of long years of scientific-technical cooperation among related institutes and organizations: the USSR State Planning, Design, and Scientific Research Institute of Maritime Transportation, the Bulgarian Institute of Water Transportation and Institute of Integrated Transportation Problems, and the East German Combine of Maritime Transportation and Port Services. Fruitful cooperation, steadily expanding and deepening, made it possible to carry out a large number of joint studies and development projects. A typical feature of the book is its practical orientation. The organization of the book into chapters and sections, the order of treatment of questions, the selection of data for publication, and finally the form of presentation of the material all serve this goal.

On the cover it says in three languages (Russian, Bulgarian, and German) that the book is addressed to engineering-technical employees of maritime and river ports, steamship lines, railroad and vehicle transportation, and foreign trade and to cargo shippers and receivers. In an attempt to write a practical manual, the authors not only summarize but also critically interpret the experience accumulated in the fields of introducing new technology, and organizing and developing cargo shipment in consolidated units between the Soviet Union and Bulgaria, as well as with East Germany and a few other countries. They review the primary

ways to raise the efficiency and improve the quality of the transportation process in mixed international transportation.

The practical orientation of the publication is reinforced by inclusion of systematized reference and analytic materials. The book contains information on the effect of maritime shipping of cargo in consolidated units on the structure of the specialized and general-purpose maritime fleet, raising the intensity of its work, development of seaports and other transportation centers, and construction of transshipping complexes. It is noted here that the crises and other negative socioeconomic and political phenomena in capitalist shipping caused a significant rise in the cost of shipping and transshipping consolidated units of cargo. Specifically, the daily costs of a dry-cargo liner with a deadweight of 8,000 tons have doubled in the last five years, while the daily costs of a containership with a capacity of 1,000 containers and LESH-type lighter carriers have almost tripled.

The book gives figures on the development of shipping and transportation in the socialist countries. Thus, during the 30 years of cooperation within the CEMA framework the volume of shipping done by all types of transportation has increased nine times. The maritime fleet is developing very dynamically; tonnage has increased 13.5 times. The book notes that export-import shipping between the Soviet Union and Bulgaria has now reached 50 percent of the total volume of transportation of the cargo of the CEMA countries, and the socialist countries account for 70 percent of the foreign trade circulation of East Germany.

The book also devotes considerable attention to the basic operating and technical specifications of the transportation fleets of the Soviet Union, Bulgaria, and East Germany that are used to deliver cargo in consolidated units. Summary figures on container carriers, ro-ro ships, timber-stack carriers, lighter carriers, ferries, and general-purpose dry-cargo ships presented in a table allow the reader to evaluate their advantages when selecting a particular transportation-technological system for shipping international standard containers, trailers, stacks, and heavy and other cargo.

The book gives a detailed review of the cargo-handling equipment of cargo shippers, receivers, and ports. It talks about the gas-powered and electric lift trucks, loading-stacking and portal cranes, container handlers, small mechanized equipment, rail platforms, and the like used in the Soviet Union, Bulgaria, and East Germany. The book devotes considerable attention to describing stacking equipment and to methods of securing stacks which have been introduced in international maritime shipping with participation by other types of transportation. The information published on pallets and stacks used to transport export and import cargoes and on the standardized parameters of containers, "flety" (translation unknown), trailers, and the like is very useful.

One of the merits of the book is its thorough treatment of the basic principles of the technology and organization of shipping and cargo-handling work and questions of interaction between transportation and clients. The authors present model technological schemes for shipping and transshipping and present algorithms developed by the Bulgarian Institute of Water Transportation for writing cargo plans for container carriers by means of computer. They also discuss the model plan

written by the USSR State Planning, Design, and Scientific Research Institute of Maritime Transportation for tracking container traffic at Vostochnyy port and tell about the method proposed by East German specialists for automating solutions to the problems of controlling cargo shipping in consolidated units. The book reviews special characteristics of handling new types of ships, for example ro-ro ships such as the Akademik Tupolev and Atlantika and lighter carriers, in port based on a summary of the experience of the Black Sea Steamship Line.

The book also covers commercial and legal questions of the organization of cargo shipping in consolidated units and the use of through documents. It discusses practices followed in the interaction of transportation organizations and clients of the socialist countries during mixed shipping "from door to door," in particular between the USSR and Bulgaria, the USSR and East Germany, and the USSR and Cuba. The authors give basic information on the rules and bilateral and multilateral agreements concluded by the socialist countries to regulate cargo shipping in international direct, mixed transportation. There is detailed consideration of the commercial law conditions of shipping, transferring, and receiving cargo in containers.

Despite the broad range of topics, the material is very clearly organized. Production photographs included in the book are particularly valuable. They show various processes of shipping and transshipping containers, stacks, and other consolidated units. These photographs are graphic and convincing evidence that the results of scientific work in the field of technology have been put into practice.

We cannot overlook the excellent work of the editors, publishers, and printers also. The book is well composed and published and easy to read.

In conclusion, it should be said that with the introduction of progressive new transportation-technological systems in shipping practices between the socialist countries it is important for new editions of the book to include as many proven standard schemes for transshipping various types of cargo as possible. They are very necessary to port workers. In addition, there should be more thorough discussion of the questions of automated control of shipping, interaction between transportation enterprises and cargo shippers and receivers, and improving the efficiency of use of their capacities and reserves.

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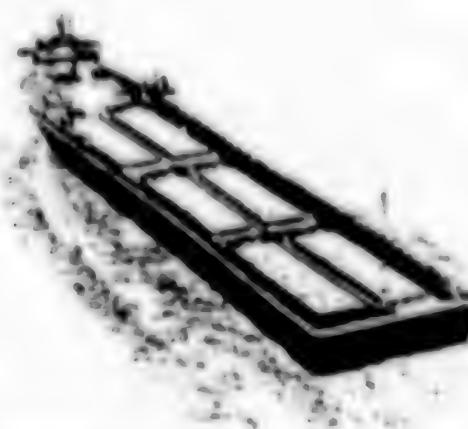
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CSO: 1829/273

OCEAN AND RIVER

NORWEGIAN PRESS: BARGE TRANSPORTER VESSELS FOR SOVIET UNION

Oslo NORWEGIAN JOURNAL OF COMMERCE AND SHIPPING in English 6 Jul 81 p 19

[Text]



According to an agreement signed in Moscow recently Valmet Oy Helsinki Shipyard will deliver in 1983 two 8 700 t dw. barge-carrying vessels of a new type to USSR. The vessels in question are of the so called feeder type, which shall operate at the ends of main ocean routes distributing and collecting barges. The vessels can also be used as an independently operating system on short routes. Among such areas may be mentioned Baltic Sea and Southeast Asian archipelago.

The vessels are able to carry six Danube Sea-Barges. As the result of this contract Valmet has succeeded in selling all the units forming a complete barge system: mother vessels, feeder ships, barges and pusher tugs.

The contract is worth abt. 200 mill. F-mark = abt. 67 mill. dollar.

CSO: 3107/116-B

OCEAN AND RIVER

BRIEFS

BARGE TRANSPORTERS--Valmet shipyard in Helsinki is to supply two types of barge transporter vessel [praammoderfartyg] to the Soviet Union. The contract signed in Moscow on Thursday [18 June] is worth around 300 million markkaa. The transporter vessels of 8,700 tons deadweight are so-called feeder traffic vessels [matartrafikfarkoster], which can transport six barges of 1,000 tons deadweight. The ships will be supplied in 1983. The deal means that Valmet is the only company in the world to succeed in selling all the components in a barge transport system--oceangoing mother ships, feeder vessels and barges. The barge transporter vessels have been designed and developed at the Valmet shipyard. They are 158.9 meters long and 31 meters wide. Their speed is around 13 knots. The deal also includes two tugs to accompany each vessel. [Text] [PM061145 Helsinki HUFVUDSTABSBLADET in Swedish 19 Jun 81 p 15]

CSO: 3107/116

MISCELLANEOUS

ALL-TERRAIN VEHICLE DESIGNED, TESTED

Moscow TRUD in Russian 30 Apr 81 p 6

[Article by Ye. Ukhov (Yoshkar-Ola): "The All-Terrain Vehicle Is Crossing the Swamp"]

[Text] The machines that are conceived within the walls of the special design bureau for the development of amphibious means of transport with aerodynamic engines at the Maryyskaya Polytechnical Institute imeni M. Gor'kiy cross swamps and snowbanks, open water and ice reefs, sludge and sand with equal ease.

For more than 10 years the institute has been working on a program for the exploration of the "expanses beyond the road." During this time dozens of models of aero-sleighs, amphibious snowmobiles and hydrofoil vehicles have been developed here.

The work here began with a portable propeller with 5 horsepower and a small gasoline-powered engine. The skier who wore this knapsack-propellor on his back did not ascend into the air, of course, but flew forward, at least as quickly as the "Buran." But the special design bureau became famous because of the lightweight airborne all-terrain freight and passenger vehicles developed for Caspian oilfield workers.

The SAVR-1, a self-propelled vehicle with air ballast, was developed at the request of the Tyumen' Main Administration of Construction for the Petroleum and Gas Industry. This is a unique hybrid of the aerosleigh and the hydrofoil. The SAVR-1 crosses snow and ice at a speed of 70 kilometers an hour and it crosses water at a slightly lower speed. It can travel 500 kilometers between service stops. It can carry three passengers and 1.2 tons of freight. It is an indispensable vehicle for oil prospectors, geologists, pipeline layers and installers of electric power lines. In terms of construction, it is simple and durable: a one-piece unsinkable body of cellular structure, a ventilation unit, an aircraft engine and a double propellor with a diameter of 2 meters. Flexible guardrails keep the air pillow hermetic, and flexible skis guarantee the vehicle's facility of movement.

Engineers Viktor Kurdin and Valeriy Yershov showed me the "Kaspiy" amphibious snowmobile model. This two-seat all-terrain vehicle is used for ice fishing in the Volga delta. It can carry a 300-kilogram load easily over smooth or rough ice and independently climb ashore. The all-union fishing association of the Caspian basin, Kaspryba, assessed the merits of this new piece of equipment: It

augments labor productivity many times over and makes the work of fishermen less dangerous and taxing. This year the industrial production of these vehicles will begin at the Pervomayskiy Ship Repair Plant in Astrakhan'.

The more powerful SAVR-2, with a carrying capacity of 2 tons, is now being developed at the request of the Sibrybeprom Association. It will be perfected in the Ob' inlet and on the coastline of the Karsk Sea.

"Hydrofoils have a great future," said S. Kirkin, candidate of technical sciences and bureau science supervisor. "In contrast to wheeled and caterpillar vehicles, they can traverse virtually any flat terrain. One of their indisputable advantages is their lack of parts which wear out quickly: They have no tracks, wheels, gear boxes, differentials and so forth. In addition to all this, these vehicles do not disturb the terrain they cross. This provides a grand opportunity for their use in agriculture to carry the harvest out of the fields in any season when the roads are bad. They can be used as loading docks with the broadest range of carrying and lifting capacities."

The Basic Guidelines for the Economic and Social Development of the USSR During 1981-1985 and During the Period up to 1990 envisage the development and incorporation of technology for the year-round construction of pipelines in regions with difficult terrain and severe weather conditions. The designers at the polytechnical institute, who are now working on a 40-ton self-propelled loading dock with air ballast at the request of the Main Administration of Construction for the Petroleum and Gas Industry, could play a part in the attainment of this objective.

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27 July 1981

Bob